health insurance status were associated with differential levels of antidepressant adherence and associated health expenditure. Hispanic ethnicity was associated with decreased antidepressant adherence compared to non-Hispanic white ($\beta = 12.53$, $P < 0.05$) and other ethnicities ($\beta = 28.27$, $P < 0.01$). Patient who were covered by public insurance had better PDC compared to uninsured patients ($\beta = 16.23$, $P < 0.05$). Patient who were covered by private insurance spent more on MDD-specific drug compared to uninsured patients ($\beta = 0.36$, $P < 0.05$). Higher antidepressant adherence was associated with higher MDD-specific drug expenditure ($\beta = 0.03$, $P < 0.01$). Use of innovative antidepressants such as SSRIs and SNRIs was associated with an increase in MDD-specific drug expenditure. **CONCLUSIONS:** Differences in antidepressant adherence and health care spending across patient factors could have important policy implications for drug formularies and health disparities. Solutions for gaps between optimal and suboptimal health care for patient mental health caused by systematic differences in sociological factors need to be well tailored. We need policy makers to be engaged in designing effective policy interventions to improve patient medication adherence, and to fund cost-effectiveness studies to improve patient outcomes and in turn, reduce associated health expenditure.

PMH50

TRENDS IN ANTIDEPRESSANT UTILIZATION, AND ASSOCIATED LABOR MARKET PARTICIPATION AND QUALITY OF LIFE OUTCOMES IN THE UNITED STATES: 2004–2007

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OBJECTIVES: Innovative antidepressants have been widely adopted. However, the differences in patient factors and antidepressant use, and associated patient health and work outcomes were not jointly studied. This study was trying to understand how patient factors and antidepressant utilization were associated with patient employment durations and quality of life. **METHODS:** A retrospective cross-sectional study was conducted using the 2004–2007 Medical Expenditure Panel Survey (MEPS) database. Proportional hazard duration models were used to examine MDD patient's employment duration. Linear regression models were implemented to study the impacts of MDD patient factors and antidepressant utilization on associated patient physical and mental health status. **RESULTS:** Differences in employment duration across several patient factors were found. Cox proportional hazard model showed that, compared to uninsured patients, MDD patients covered by private insurance had a lower level of hazard of job termination (hazard ratio = 0.15, $P < 0.01$). Patients who were in better physical health conditions had a lower level of hazard of job termination (hazard ratio = 0.96, $P < 0.01$). Results from OLS regressions showed that, compared to patient without antidepressant pharmacotherapy for MDD treatment, patients who took innovative antidepressants such as SSRIs/SNRIs and other newer ones had a huge increase in MCS ($\beta = 11.35$, $P < 0.01$). In addition, better antidepressant adherence was significantly associated with an increase of MCS ($\beta = 0.10$, $P < 0.01$). **CONCLUSIONS:** This study suggested that effective policy interventions were needed for improving medication adherence, and the design of prescription drug benefit within health insurance should be tailored considering its associations with patient factors and related improvement in health status according to the findings of this study. We need policy makers to be engaged in designing effective policy interventions to improve patient medication adherence, which may in turn improve patient health status and labor market participation.

PMH51

HEALTH STATUS AND COST OF CARE IN PATIENTS WITH DEMENTIA IN GERMANY

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OBJECTIVES: To assess cost-of-illness and patient-relevant outcomes in patients with dementia in different settings in the German health system. **METHODS:** 600 patients with dementia were recruited at 1) a university hospital; 2) general practitioners; 3) office-based neurologists; 4) a regional psychiatric hospital; and 5) in long-term care facilities. Socio-demographic, economic and clinical parameters were assessed using a standardized questionnaire. Disease severity was measured by means of the Minimental Status Examination (MMSE) and the Alzheimer's Disease Assessment Scale. Neuropsychiatric status was assessed with the Geriatric Depression Scale, the Neuropsychiatric Inventory and the Alzheimer's Disease Cooperative-Study-Activities of Daily Living. Patient's quality of life was reported by the patient and also by the caregiver (employing the EuroQol and the QoL-AD instruments). **RESULTS:** For an interim analysis, 278 patients (180 female, 98 male) were available. Mean age was 78.2 yrs and mean disease duration was 4.5 yrs (SD 3.9). On average, care was needed for 3.0 yrs (SD 3.1). Cognitive impairment was severest in institutionalized patients (MMSE 12.2 pts SD 8.2) compared to the mean of all patients (MMSE 16.9 Pts). Mean EQ VAS values were 60.5 pts (SD 20.2). Disease-specific QoL-AD health status mean was 30.2 (SD 5.6). Health status was rated highest in long-term care facilities (EQ VAS) and at office-based neurologists (QoL-AD). In all severity stages patients rated their own health status (Qol-AD) better than their relatives. The costs of antidementia drugs were €45,000 per 3 months. Memantine accounted for 61%. a total of 41% of the patients received Memantine whereas 45% of the patients received no anti-dementia medication. **CONCLUSIONS:** Health status is considerably impaired in patients with dementia and their caregivers. Interestingly, caregivers often appraise patients' Quality of life worse than the patients themselves. Altogether, our results indicate a considerable under-supply with anti-dementia drugs.

PMH52

A SHORT 12-ITEM ZARIT BURDEN INVENTORY FOR THE ASSESSMENT OF DEMENTIA CAREGIVERS AS OBTAINED BY ITEM RESPONSE THEORY

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OBJECTIVES: The Zarit Burden Inventory (ZBI) is a 22-item self-report scale frequently used to asess patients' caregiver burden on several dimensions. As a multidimensional instrument the interpretation of its total score is sometimes unclear. Our aim was to obtain a short-ZBI unidimensional scale based on Item Response Theory (IRT) approaches. **METHODS:** The validation sample comprised 246 caregivers of patients diagnosed with dementia and recruited for an ongoing multi-center randomized clinical trial on the efficacy of psychoeducational interventions (EDUCA-2 trial). The pre-randomization 22-item ZBI was analyzed according to the Samejima's graded response model to select the more informative items. The dimensionality of the scale was further tested with Confirmatory Factor Analysis (CFA). Finally, discriminant validity was assessed by Receiving Operator Characteristic (ROC) analysis and the Area Under the Curve (AUC) contrasting the short scale total score against the psychological distress criterion evaluated with the General Health Questionnaire 28-item at 5/6 cut-off. **RESULTS:** A 12-item short-ZBI was selected. It covered 87% of the total 22-item ZBI information and showed appropriate item curve characteristics according to the Samejima's model. The short-ZBI had an internal reliability of 0.89 (Cronbach's alpha), and was compatible with a unidimensional latent structure for the burden construct (CFI = 0.99; RMSEA = 0.05). According to the GHQ-28 cut-off 131 caregivers (53% of the total sample) could be considered at high risk for developping psychological distress. The discriminant validity of the short-ZBI scale against that criterion was good (AUC = 0.84, 95% CI = 0.79 to 0.89) and not significantly different from the parental 22-item ZBI (p = 0.85). **CONCLUSIONS:** We have found good psychometric properties for the short-ZBI scale derived from IRT. Its unidimensionality might be important to enhance its interpretation. Further psychometric studies, mainly on its sensitivity to change are now warranted.

PMH53

FACTOR STRUCTURE OF A SOCIAL SUPPORT SCALE FOR ADOLESCENTS TREATED FOR SUBSTANCE USE DISORDER

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OBJECTIVES: The literature indicates that social support is protective of relapse for adolescents treated for substance use disorder (SUD). Unfortunately, no standard measure of social support exists. The objective of this research is to use factor analysis to elucidate the underlying factor structure of a 14-item social support scale for use in outcomes assessment in this treatment population. **METHODS:** Subjects are 517 adolescents discharged from primary substance abuse treatment from 2004–2008. The data is from research conducted between 6 and 12 months post discharge via a 234-item questionnaire that included the 14-item social support scale. The scale has questions that assess the degree to which the adolescent's social contacts conform to norms of positive behavior and therefore foster non-use and recovery. The response rate was 62 percent. **RESULTS:** The factorability of the scale was assessed by Keiser-Meyer-Olkin statistic (it was 0.727, > the recommended 0.6) and by Bartlett's test of sphericity which was significant ($x^2 = 1066.89$, p = 0.00001). The scale was decomposed by principal component factor analysis and three factors emerged. Initial Eigen values explained 65.6, 23.1 and 11.3 percent of the variance, respectively. Final factor solutions were examined using varimax, oblimin and promax rotations with 3, 4, 5 & 6 solutions, respectively. a three-factor solution via promax explaining 99 percent of the variance emerged as the best solution although results were similar using the other rotations. Factor 1 yielded ten items that are attributes of a peers' potential to be positive a or negative influence and thus supportive of recovery. The three items in Factor 2 related to emotional dimensions of social support. Factor 3 contained two items indicating a recovering adolescent's ability to seek-out and establish positive social contacts. **CONCLUSIONS:** This scale is useful as a standard measure of social support which is an important aspect of treatment success.

PMH54

USE OF THE ANALYTIC HIERARCHY PROCESS TO PRIORITIZE PATIENT-RELEVANT ENDPOINTS OF ANTIDEPRESSANT TREATMENT

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OBJECTIVES: In deciding about coverage of new medical technology, multiple clinical outcomes are used to support reimbursement claims. Neither the real world value nor the relevance of these outcome measures for patients is systematically assessed. Hence, there is growing interest in the use of patient-reported outcome measures. Multi-criteria decision analysis, like the analytic hierarchy process (AHP), is a technique to elicit patient preferences. In the present study we used AHP to prioritize patient relevant endpoints related to the use of antidepressants in major depression.